

**Amendments to the Claims**

Please cancel Claims 19-22, 24-47 and 50-56.

Please add new Claims 57-65.

The Claim Listing below will replace all prior versions of the claims in the application:

**Claim Listing**

- 1-56. (Canceled)
57. (New) An anti-idiotypic antibody, or functional fragment thereof, which is specific for cA2.
58. (New) An anti-idiotypic antibody of Claim 57 which binds to one or more CDRs of cA2 or A2.
59. (New) An anti-idiotypic antibody of Claim 57 which is murine.
60. (New) An anti-idiotypic antibody containing at least one antigen recognition site which mimics antigenic regions of human TNF- $\alpha$ , said anti-idiotypic antibody obtained from a hybridoma produced by fusing mouse splenocytes immunized with A2 or cA2 with myeloma cells.
61. (New) An immunoassay method for detecting an anti-TNF- $\alpha$  antibody in a sample, comprising:
  - (a) contacting said sample with an anti-idiotypic antibody to an anti-TNF- $\alpha$  antibody, wherein the anti-TNF- $\alpha$  antibody comprises an amino acid sequence selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:5, wherein the anti-idiotypic antibody is in detectably labeled form; and
  - (b) detecting the binding of the anti-idiotypic antibody to the anti-TNF- $\alpha$  antibody, wherein the anti-TNF- $\alpha$  antibody in the sample is detected.

62. (New) An immunoassay method for detecting an anti-TNF- $\alpha$  antibody in a sample, comprising:
  - (a) contacting said sample with the anti-idiotypic antibody of Claim 57, in detectably labeled form; and
  - (b) detecting the binding of the anti-idiotypic antibody to the anti-TNF- $\alpha$  antibody, wherein the anti-TNF- $\alpha$  antibody in the sample is detected.
63. (New) An immunoassay method for detecting an anti-TNF- $\alpha$  antibody in a sample, comprising:
  - (a) contacting said sample with the anti-idiotypic antibody of Claim 58, in detectably labeled form; and
  - (b) detecting the binding of the anti-idiotypic antibody to the anti-TNF- $\alpha$  antibody, wherein the anti-TNF- $\alpha$  antibody in the sample is detected.
64. (New) An immunoassay method for detecting an anti-TNF- $\alpha$  antibody in a sample, comprising:
  - (a) contacting said sample with the anti-idiotypic antibody of Claim 59, in detectably labeled form; and
  - (b) detecting the binding of the anti-idiotypic antibody to the anti-TNF- $\alpha$  antibody, wherein the anti-TNF- $\alpha$  antibody in the sample is detected.
65. (New) An immunoassay method for detecting an anti-TNF- $\alpha$  antibody in a sample, comprising:
  - (a) contacting said sample with the anti-idiotypic antibody of Claim 60, in detectably labeled form; and
  - (b) detecting the binding of the anti-idiotypic antibody to the anti-TNF- $\alpha$  antibody, wherein the anti-TNF- $\alpha$  antibody in the sample is detected.